| Application No. 09/641,519 August 21, 2000 B. Peugh 2187  Applicant(s): Kevin J. Ryan  TO THE COMMISSIONER FOR PATENTS  Transmitted herewith is an Amendment in the above-identified application.  The fee has been calculated as shown below.  CLAIMS AS AMENDED    Claims   Remaining   Previously   Previousl |  |  | ΓRANSM   |   | ETTER                  | Docket No.<br>M4065.0290/P2 |
|--|--|--|--|---|------------------------|-----------------------------|
| Applicant(s): Kevin J. Ryan  nvention: DRAM WITH HIDDEN REFRESH  TO THE COMMISSIONER FOR PATENTS  Transmitted herewith is an Amendment in the above-identified application.  The fee has been calculated as shown below.    Claims Remaining After After Amendment Previously Paid Previously Paid Previously Present Rate   | Application  |  |  |   |                        |                             |
| TO THE COMMISSIONER FOR PATENTS  Transmitted herewith is an Amendment in the above-identified application.  The fee has been calculated as shown below.    Claims   Remaining   Highest   Number   Extra Claims   Previously   Extra Claims   Previously   Extra Claims   Rate   | <u>U9/641,5</u>  | 519  | August ∠   | 1, 2000   | B. Peugn               |                             |
| TO THE COMMISSIONER FOR PATENTS  Transmitted herewith is an Amendment in the above-identified application.  The fee has been calculated as shown below.    Claims  | pplicant(s): Kevi  | n J. Ryan  |  |   |                        |                             |
| Transmitted herewith is an Amendment in the above-identified application.  The fee has been calculated as shown below.    CLAIMS AS AMENDED  | nvention: DRAM   | WITH HIDDEN  | N REFRESH  |   |                        |                             |
| CLAIMS AS AMENDED    Claims   Remaining   After   Amendment   Paid   Present   Rate   Previously Present   Present   Previously Present   Previously Present   Prese | _  | TC   | THE COMM   | ISSIONER FO   | OR PATENTS             |                             |
| CLAIMS AS AMENDED    Claims   Remaining   After   Amendment   Previously   Extra Claims   Present   Rate   Previously   Extra Claims   Present   Rate   Previously   Extra Claims   Present   Rate   Previously   Present   Previously   Present   Rate   Previously   Present   Previously   Present   Rate   Previously   Present   Previously   Present   Previously   Present   Previously   Present   Previously   Present   Present   Present   Present   Present   Present   Present   Present   Present   Previously   Present   Present   Present   Present   Present   Previously   Present   Pr | Transmitted herev  | with is an Ame   | endment in the   | above-identif                                       | ied application.       |                             |
| Claims Remaining After Amendment   Previously Paid   Extra Claims Present   Rate   | The fee has been   | calculated as  | shown below.   |   |                        |                             |
| Remaining After Amendment Paild Present Present Rate   Rate  |  |  |  |   |                        |                             |
| Independent Claims 9 - 9 = 0 x 84.00 0  Multiple Dependent Claims (check if applicable) 280.00 0  Other fee (please specify): 0  TOTAL ADDITIONAL FEE FOR THIS AMENDMENT: 0  x Large Entity Small Entity  x No additional fee is required for this Amendment.  Please charge Deposit Account No. in the amount of \$ A duplicate copy of this sheet is enclosed.  A check in the amount of \$ to cover the filing fee is enclosed.  Payment by credit card. Form PTO-2038 is attached.  x The Commissioner is hereby authorized to charge and credit Deposit Account No. 04-1073 as described below.  x Credit any overpayment.  x Charge any additional fling or application processing fees required under 37 CFR 1.16 and 1.17 Dated: April 28, 2003  |  | Remaining<br>After   | Number<br>Previously   | Extra Claims  | Rate                   |                             |
| Multiple Dependent Claims (check if applicable)  Other fee (please specify):  TOTAL ADDITIONAL FEE FOR THIS AMENDMENT:  O  X Large Entity  X No additional fee is required for this Amendment.  Please charge Deposit Account No in the amount of \$ A duplicate copy of this sheet is enclosed.  A check in the amount of \$ to cover the filing fee is enclosed.  Payment by credit card. Form PTO-2038 is attached.  X The Commissioner is hereby authorized to charge and credit Deposit Account No as described below.  X Credit any overpayment.  X Charge any additional filing or application processing fees required under 37 CFR 1.16 and 1.17 Dated: April 28, 2003  Thomas J. D'Amico   |  | 56   | - 56 =   | 0   | x 18.00                | 0                           |
| Other fee (please specify):    TOTAL ADDITIONAL FEE FOR THIS AMENDMENT:   0     X Large Entity   Small Entity     X No additional fee is required for this Amendment.     Please charge Deposit Account No. in the amount of \$     A duplicate copy of this sheet is enclosed.     A check in the amount of \$ to cover the filing fee is enclosed.     Payment by credit card. Form PTO-2038 is attached.     X The Commissioner is hereby authorized to charge and credit Deposit Account No. 04-1073 as described below.     X Credit any overpayment.     X Charge and additional filing or application processing fees required under 37 CFR 1.16 and 1.17     Dated: April 28, 2003     Thomas J. D'Amico   |  | 9  | - 9 =  | 0   | x 84.00                | 0                           |
| TOTAL ADDITIONAL FEE FOR THIS AMENDMENT:    X   Large Entity   | Multiple Depende   | ent Claims (ch   | eck if applicab  | le)   | 280.00                 | 0                           |
| X Large Entity   | Other fee (please  | e specify):  |  |   |                        | 0                           |
| X No additional fee is required for this Amendment.   Please charge Deposit Account No in the amount of \$ A duplicate copy of this sheet is enclosed.   A check in the amount of \$ to cover the filing fee is enclosed.   Payment by credit card. Form PTO-2038 is attached.   X The Commissioner is hereby authorized to charge and credit Deposit Account No 04-1073 as described below.   X Credit any overpayment.   X Charge any additional filing or application processing fees required under 37 CFR 1.16 and 1.17     Dated: April 28, 2003   | TOTAL ADDITION   | ONAL FEE FO  | OR THIS AME  | NDMENT:   |                        | 0                           |
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| A duplicate copy of this sheet is enclosed.  A check in the amount of \$   | x No additional  | I fee is require   | d for this Ame   | ndment.   |                        |                             |
| A check in the amount of \$ to cover the filing fee is enclosed.  Payment by credit card. Form PTO-2038 is attached.  X The Commissioner is hereby authorized to charge and credit Deposit Account No  |  |  |  |   | n the amount of \$ _   |                             |
| Payment by credit card. Form PTO-2038 is attached.  X The Commissioner is hereby authorized to charge and credit Deposit Account No  | Please charg   | والمالية المراكبة والمراكبة  |  | .)  |                        |                             |
| The Commissioner is hereby authorized to charge and credit Deposit Account No  | Please charg A duplicate c   |  |  |   |                        |                             |
| as described below.  X Credit any overpayment.  X Charge any additional filing or application processing fees required under 37 CFR 1.16 and 1.17  Dated: April 28, 2003  Thomas J. D'Amico  | Please charg A duplicate c  A check in th  | e amount of \$   |  | to cover  | the filing fee is encl | osed.                       |
| Charge any additional filing or application processing fees required under 37 CFR 1.16 and 1.17  Dated: April 28, 2003  Thomas J. D'Amico  | Please charg A duplicate c  A check in th  | e amount of \$   |  | to cover  | the filing fee is encl | osed.                       |
| Thomas J. D'Amico  Dated: April 28, 2003   | Please charg A duplicate c  A check in th  Payment by c  X The Commission  | e amount of \$ credit card. Fo   | orm PTO-2038   | to cover is attached.                               |                        |                             |
| Thomas J. D'Amico  | Please charg A duplicate c  A check in th  Payment by c  X The Commiss as described  X Credit an                                       | e amount of \$ credit card. For sioner is hereby below.                | orm PTO-2038<br>by authorized t                              | to cover is attached.                               | credit Deposit Acco    | ount No. <u>04-1073</u>     |
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| DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP   | Please charg A duplicate c A check in th Payment by c X The Commiss as described X Credit an X Charge a Thomas J. D'An Attorney Reg. N | sioner is herebelow.  ny overpayment additional filinico.  lo.: 28,371 | orm PTO-2038<br>by authorized t<br>nt.<br>ing or application | to cover is attached. to charge and on processing f | credit Deposit Acco    | ount No04-1073              |

Washington, DC 20037-1526 (202) 828-2232

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APR 3.0 2003

Technology Center 2100



Docket No.: M4065.0290/P290 (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Kevin J. Ryan

Application No.: 09/641,519

Group Art Unit: 2187

Filed: August 21, 2000

Examiner: B. Peugh

For: DRAM WITH HIDDEN REFRESH

**AMENDMENT** 

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APR 3,0 2003

Technology Center 2100

Commissioner for Patents Washington, DC 20231

Dear Sir:

In response to the Office Action dated January 27, 2003 (Paper No. 6), please amend the above-captioned application as follows:

## IN THE CLAIMS:

Replace claims 15, 37 and 47 with amended claims 15, 37 and 47 below.

15. (Amended) The system of claim 13 further comprising a memory source other than said memory cells such that said controller operates said DRAM such that a conflicting data access command is satisfied with said memory source other than said memory cells and wherein said memory cells may be refreshed.

Bo

37. (Amended) The integrated circuit device of claim 35, wherein said system further comprises a memory source other than said memory cells such that upon said controller determining that data stored in at least some of said memory cells is in danger of